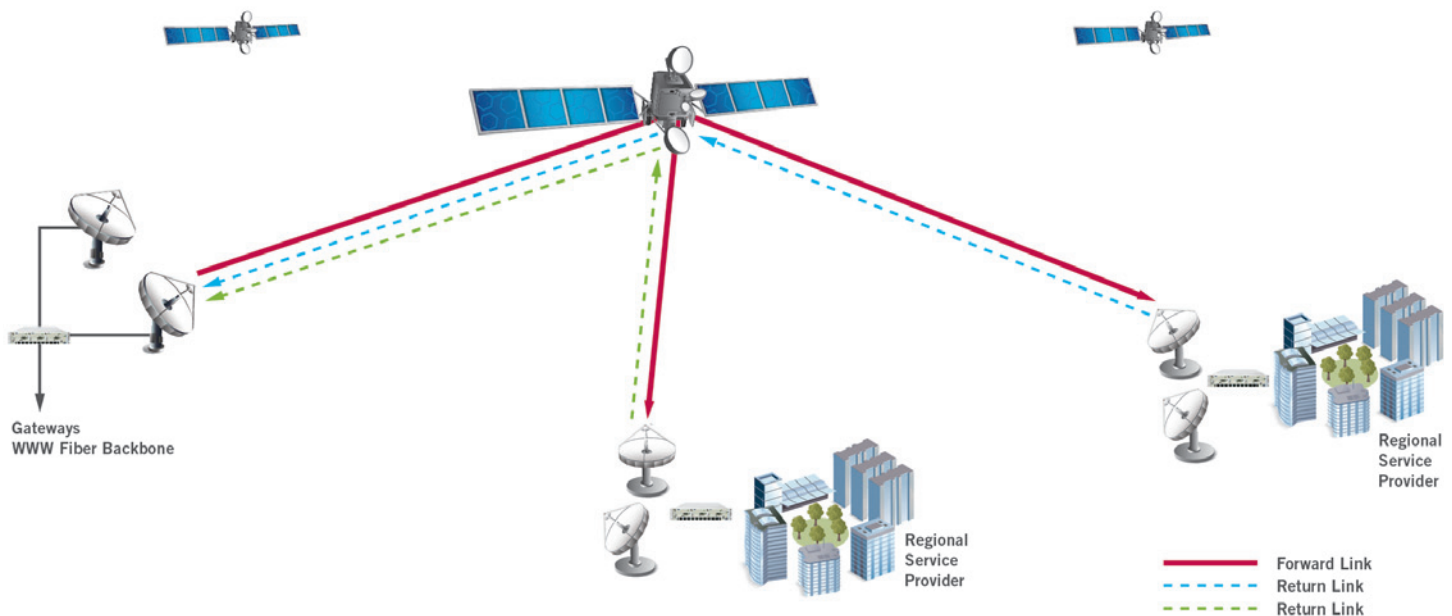


ViaSat's MEOLink IP trunking terminal enables emerging market telcos and ISPs to offer fiber-like performance for high-speed internet services over O3b's medium earth orbit (MEO) satellite constellation. In combination, the O3b satellites and the MEOLink terminal extend high speed internet access to rural markets over a cost effective satellite connection, making the Internet a truly global and universal experience.

ViaSat's MEOLink terminal includes precision tracking antennas, the high-speed DVB-S2 MEOLink modem, and an advanced uplink power control system. The system operations are coordinated with the fully automated MEOLink monitor and control system.



MODEM DESIGNED FOR SPEED AND EFFICIENCY

ViaSat's MEOLink modem is designed for high data rates extending the reach of Internet services to rural and underserved communities supported by the O3b constellation. Based on the efficiency of the DVB-S2 waveform, the modem automatically provides the greatest data rates based on the signal strength. Integrated Adaptive Coding & Modulation (ACM), with modulations up to 32APSK, enables Ethernet data rates up to 810 Mbps in each direction. To optimize forward channel efficiency based on the application, the modem can be used in point-to-point and point-to-multipoint networks.

FLEXIBLE ARCHITECTURE

The modem acts as a specialized Layer2 VLAN bridge with selectable QoS and flow control features allowing it to be combined with industry standard networking equipment to support IP network designs. It has wide range L-band intermediate frequency (IF) interfaces to allow maximum flexibility in RF equipment selection. These interfaces support internal and external referenced RF block converters as well as providing power to RF block downconverters.

Dual receivers have been incorporated to seamlessly manage the make-before-break connections during satellite transfers without loss or repetition of data.

MEOLINK MODEM AT-A-GLANCE

- » Data rates of up to 810 Mbps in each direction
- » Bandwidth efficient DVB-S2 waveform with modulations up to 32-APSK
- » Adaptive Coding and Modulation
- » Point-to-Multipoint and Point-to-Point connectivity
- » Layer2 Ethernet connectivity with VLAN
- » Ethernet header compression
- » Dual receivers for seamless connections during satellite transfers

SPECIFICATIONS

TRANSMIT IF INTERFACE

Frequency	950-2450 MHz
Frequency step size	100 Hz
Reference	Internal or External 10MHz
Transmit power level	-5 to -25 dBm
IF monitor power	-25 dBc typical
Output impedance	50 ohm
Output connector	SMA (f)
IF monitor connector	SMA (f)
BUC reference frequency	10 MHz
BUC reference level	-1 to +5 dBm

RECEIVE IF INTERFACE

Frequency	950-2450 MHz
Signal input level	-75dBm + 10 log(SR) (symbol rate in units of MHz)
AGC Range	Up to 40dB above minimum, maximum -25dBm
Local IF Loopback	Present
Input impedance	50 ohms
Input connector	SMA (f)
LNB Power	350mA @ 18 VDC (to each LNB)
LNB Reference	10MHz, -1 to +5 dBm on Rx port

MODULATION AND CODING

Modulation and coding	QPSK, 8PSK, 16APSK, & 32APSK per ETSI EN 302307 DVB-S2
Baseband roll-off	0.20, 0.25, 0.35
Connectivity	Point to point and point to multipoint
Adaptive Coding & Modulation	Included
Symbol rates	10 to 180 Msym/sec
Data rate	As waveform allows (4.9 to 810Mbps)

BASEBAND

Traffic physical interface	Dual RJ45 Gigabit Ethernet interfaces with additional redundant pair for back up router
Bridging	802.1Q VLAN
Ethernet frame size	Normal and Jumbo (9K bytes)
QoS	Layer 2 prioritization for marked packets including 802.1p with 8 priority queues
Flow Control	802.3x, Ethernet flow control
Logical Interface	Configurable VLAN range per interface
Ethernet Header Compression	25% compression (small packets)
Loopbacks	Terrestrial and IF loopbacks diagnostics

MONITOR AND CONTROL

Remote web GUI	Included
Physical interface	» RJ45 Ethernet interface » Primary and backup connection
Remote SNMPv2c	Included

PHYSICAL AND ENVIRONMENTAL

Input power	100-240 VAC, 47-63 Hz
Operating temperature	15° to 40° C
Operating humidity	20 to 90% relative humidity, non- condensing
Storage temperature	-20° to +70° C
Storage humidity	Up to 95% non-condensing
Size	EIA Standard Rack-Mount 2 RU high
MTBF	80,000 hours
Cooling	Hot-swappable blower modules with 3-for-2 redundancy



CONTACT



VIASAT INC.
1725 Breckinridge Plaza
Duluth, GA 30096
TEL +1 678 924 2631
EMAIL iptrunking@viasat.com
WEB www.viasat.com



O3B NETWORKS LIMITED
St John's Manor Offices, Le Neuf Chemin
St John, Jersey, JE34EH, Channel Islands
TEL +44 1534 865 000
FAX +44 1534 862 301
WEB www.o3bnetworks.com